

12/4/97 Draft

Water Year	Flow (acre-feet)	Flow Weighted Load			Flow Weighted Concentration		
		Se (lbs)	B (1000 lbs)	TDS (tons)	Se (µg/L)	B (mg/L)	TDS (mg/L)
1986	67,006	9,524	787	214,250	52.3	4.32	2,351
1987	74,902	10,959	889	241,526	53.8	4.37	2,371
1988	65,327	10,097	821	236,301	56.8	4.62	2,660
1989	54,186	8,718	743	202,420	59.2	5.04	2,747
1990	41,662	7,393	672	171,265	65.2	5.93	3,023
1991	29,290	5,858	544	129,899	73.5	6.83	3,261
1992	24,533	5,083	435	110,327	76.2	6.53	3,307
1993	41,197	8,856	730	183,021	79.0	6.51	3,267
1994	38,670	8,468	645	171,495	80.5	6.13	3,261
1995	57,574	11,875	868	237,530	75.8	5.55	3,034

Table 16. Annual Loads and Flow Weighted Concentrations from Drainage Problem Area

Water Year	Flow (acre-feet)	Flow Weighted Load			Flow Weighted Concentration		
		Se (lbs)	B (1000 lbs)	TDS (tons)	Se (µg/L)	B (mg/L)	TDS (mg/L)
1986	284,316	6,643	1,368	494,544	8.6	1.77	1,279
1987	233,843	7,641	1,265	438,904	12.0	1.99	1,380
1988	230,454	8,132	1,301	455,956	13.0	2.08	1,455
1989	211,393	8,099	1,139	389,325	14.1	1.98	1,354
1990	194,656	7,719	1,121	380,564	14.6	2.12	1,438
1991	102,162	3,899	612	221,542	14.0	2.20	1,595
1992	85,428	2,919	522	197,352	12.6	2.25	1,699
1993	167,955	6,871	1,066	336,522	15.0	2.33	1,473
1994	183,546	7,980	1,116	379,408	16.0	2.24	1,520
1995	263,769	10,694	1,459	499,339	14.9	2.03	1,392

Table 17. Annual Loads and Flow Weighted Concentrations, Combined Mud and Salt Sloughs

Water Year	Flow (acre-feet)	Flow Weighted Load			Flow Weighted Concentration		
		Se (lbs)	B (1000 lbs)	TDS (tons)	Se (µg/L)	B (mg/L)	TDS (mg/L)
1986	2,676,764	11,305	2,546	991,086	1.6	0.35	272
1987	662,135	8,857	1,681	715,301	4.9	0.93	794
1988	549,412	9,330	1,854	731,877	6.2	1.24	980
1989	438,398	7,473	1,305	543,916	6.3	1.09	912
1990	404,163	6,125	1,142	537,896	5.6	1.04	979
1991	291,223	3,548	760	419,457	4.5	0.96	1,059
1992	304,151	3,064	740	391,336	3.7	0.89	946
1993	891,230	8,379	1,643	686,212	3.5	0.68	566
1994	562,301	7,270	1,260	574,735	4.8	0.82	752
1995	3,504,034	14,291	2,296	1,236,981	1.6	0.24	260

Table 18. Annual Loads and Flow Weighted Concentrations, San Joaquin River near Patterson

12/4/97 Draft

Water Year	Flow (acre-feet)	Flow Weighted Load			Flow Weighted Concentration		
		Se (lbs)	B (1000 lbs)	TDS (tons)	Se (µg/L)	B (mg/L)	TDS (mg/L)
1986	5,226,038	14,601	2,471	1,273,398	1.0	0.17	179
1987	1,813,216	8,502	1,774	909,003	1.7	0.36	369
1988	1,168,066	8,427	1,694	851,851	2.7	0.53	536
1989	1,058,670	8,741	1,617	726,390	3.0	0.56	505
1990	915,523	7,472	1,387	677,569	3.0	0.56	544
1991	656,954	3,611	857	484,581	2.0	0.48	542
1992	700,177	3,558	894	458,279	1.9	0.47	481
1993	1,702,457	8,905	1,790	875,611	1.9	0.39	378
1994	1,219,382	7,760	1,448	698,583	2.3	0.44	421
1995	6,299,190	17,238	3,016	1,420,474	1.0	0.18	166

Table 19. Annual Loads and Flow Weighted Concentrations, San Joaquin River near Vernalis

Tables 16 to 19 from Ten Year Load Report, Volume I
Load Calculations, 1998 CVRWCCB Report by Grober et al

Report will be released January, 1998

Loads based on:

TDS mean daily discharge to EC @ Vernalis, Patterson & Slough sites
weekly & for monthly grab samples of DPA for Drainage Problem
Area sites

B, Se ... weekly to monthly grab samples @ each site

Figure 4. Annual Discharge for Drainage Problem Area, Sloughs, and SJR Sites

Discharge for the SJR near Vernalis was less than 2 million acre-feet annually for water years 1987 to 1994. The highest annual discharge from the DPA, approximately 75,000 acre-feet, occurred in water year 1987, a critically dry year that followed the wet water year of 1986. The third highest discharge occurred in 1988, another critically dry year. The second and fourth highest discharge from the DPA occurred in the wet water years, 1986 and 1995, respectively. This suggests that discharges from the DPA are related to antecedent conditions in the SJR.